

AMENDMENTS TO THE CLAIMS

Claims 1-7 (Cancelled)

8. (New) A method of fabricating a semiconductor device, comprising:

arranging a plurality of elongated leadframes side by side and separate from each other;

mounting a plurality of semiconductor chips on the plurality of leadframes so that the semiconductor chips are spaced apart from each other along a direction of elongation of the leadframes, each of the semiconductor chips having a first main surface and a second main surface opposite the first main surface, each of the semiconductor chips having a plurality of electrode pads on the first main surface thereof, the semiconductor chips being mounted so that the second main surface of each of the semiconductor chips faces the leadframes;

joining the plurality of electrode pads on the first main surface of each of the semiconductor chips to the plurality of leadframes via bonding wires;

separately encapsulating each of the semiconductor chips and the bonding wires so as to form main encapsulation parts;

filling a space between adjacent leadframes exposed outside of the main encapsulation parts so as to form interframe encapsulation parts;

forming grooves by cutting all of the leadframes directly under the second main surface of each of the semiconductor chips in a direction orthogonal to the direction of elongation of the leadframes; and

cutting the leadframes and the interframe encapsulation parts exposed between the main encapsulation parts so as to form a plurality of semiconductor devices each having a first external terminal row formed of the cut leadframes, a second external terminal row formed of the cut leadframes and facing the first external terminal row so as to sandwich one of the grooves therebetween, and one of the semiconductor chips mounted on the first external terminal row and the second external terminal row.

9. (New) The method of claim 8, wherein said mounting of the plurality of semiconductor chips comprises mounting the semiconductor chips so as to maintain exposed outermost leadframes on each end of each of the semiconductors, said joining does not include joining bonding wires to the exposed outermost leadframes.

10. (New) The method of claim 8, wherein said mounting comprises mounting the semiconductor chips directly on the leadframes so that the second main surface of each of the semiconductor chips is directly attached to the leadframes via adhesive.

11. (New) A method of fabricating a semiconductor device, comprising:

arranging a plurality of elongated leadframes side by side and separate from each other;
mounting a plurality of semiconductor chips on the plurality of leadframes so that the semiconductor chips are spaced apart from each other along a direction of elongation of the leadframes, each of the semiconductor chips having a first main surface and a second main surface opposite the first main surface, each of the semiconductor chips having a plurality of electrode pads on the first main surface thereof, the semiconductor chips being mounted so that the second main surface of each of the semiconductor chips faces the leadframes;

joining the plurality of electrode pads on the first main surface of each of the semiconductor chips to the plurality of leadframes via bonding wires;

encapsulating the semiconductor chips and the bonding wires so as to form an encapsulation layer including the semiconductor chips and the bonding wires;

forming grooves by cutting all of the leadframes directly under the second main surface of each of the semiconductor chips in a direction orthogonal to the direction of elongation of the leadframes; and

cutting the leadframes and the encapsulation layer between the semiconductor chips within the encapsulation layer so as to form a plurality of semiconductor devices each having a first external terminal row formed of the cut leadframes, a second external terminal row formed of the cut leadframes and facing the first external terminal row so as to sandwich one of the

grooves therebetween, and one of the semiconductor chips mounted on the first external terminal row and the second external terminal row.

12. (New) The method of claim 11, wherein said mounting of the plurality of semiconductor chips comprises mounting the semiconductor chips so as to maintain exposed outermost leadframes on each end of each of the semiconductors, said joining does not including joining bonding wires to the exposed outermost leadframes.

13. (New) The method of claim 11, wherein said mounting comprises mounting the semiconductor chips directly on the leadframes so that the second main surface of each of the semiconductor chips is directly attached to the leadframes via adhesive.

14. (New) A semiconductor device comprising:

a plurality of first external terminals spaced apart from each other;

a plurality of second external terminals spaced apart from each other, said plurality of first external terminals and said plurality of second external terminals being arranged so as to be spaced apart and oppose each other across a gap;

a semiconductor chip having a first main surface and a second main surface opposite said first main surface, said first main surface having a plurality of electrode pads mounted thereon, said semiconductor chip being mounted on said plurality of first external terminals and said plurality of second external terminals so that said second main surface of said semiconductor chip faces said plurality of first external terminals and said plurality of second external terminals;

a plurality of bonding wires joining said plurality of electrodes on said first main surface of said semiconductor chip to said first external terminals and said second external terminals;

a main encapsulation part encapsulating said semiconductor chip and said bonding wires; and

a frame encapsulation part filling an area between each of said first external terminals and filling an area between each of said second external terminals.

15. ⁴(New) The semiconductor device of claim 14, wherein said main encapsulation part and said frame encapsulation part are formed as a single integral component.

16. (New) The semiconductor device of claim 14, wherein said plurality of first external terminals are spaced apart from each other so as to form a stripe pattern.

17. (New) The semiconductor device of claim 14, wherein said semiconductor chip is directly mounted on said plurality of first external terminals and said plurality of second external terminals so that said second main surface of said semiconductor chip is directly attached to each of said plurality of first external terminals and each of said plurality of second external terminals via adhesive.